

What is claimed is:

1. A fixing device of an image forming apparatus comprising a heating roller according to a system in which a plurality of heating sources different in light-distribution characteristics are disposed internally, and the surface is divided in region in the lengthwise direction, characterized in that

as said plurality of heating sources, there are disposed at least, a heating source for mainly heating a heating roller surface in a region through which paper of small width passes, and a heating source for mainly heating a heating roller surface in a region through which paper of small width does not pass where paper of large width;

there are disposed at least, a temperature detector for detecting a temperature of a heating roller surface in a region through which paper of small width passes, and a temperature detector for detecting a temperature of a heating roller surface in a region through which paper of small width does not pass where paper of large width; and

warming up operation is continued, and when a temperature detected by the temperature detector for detecting a temperature of a heating roller surface in either region reaches a temperature capable of fixing, a ready display is lighted.

2. A fixing device of an image forming apparatus comprising a heating roller according to a system in which a plurality of heating sources different in light-distribution characteristics are disposed internally, and the surface is divided in region in the lengthwise direction, characterized in that

as said plurality of heating sources, there are disposed at least, a heating source for mainly heating a heating roller surface in a region through which paper of small width passes, and a heating source for mainly heating a

heating roller surface in a region through which paper of small width does not pass where paper of large width;

there are disposed at least, a temperature detector for detecting a temperature of a heating roller surface in a region through which paper of small width passes, and a temperature detector for detecting a temperature of a heating roller surface in a region through which paper of small width does not pass where paper of large width; and

warming up operation is continued, and when a temperature detected by the temperature detector for detecting a temperature of a heating roller surface in either region reaches a temperature capable of fixing, a ready display is lighted, thereafter only a heating source for mainly heating a heating roller surface in a region not having reached a temperature capable of fixing is forcibly lighted till the fixed conditions are satisfied, and at the time of said forcible lighting operation, a heating source for mainly heating a heating roller surface in a region having reached a temperature capable of fixing is not lighted.

3. The fixing device of an image forming apparatus according to claim 2, wherein a temperature detector for detecting a using environmental temperature is disposed, and where a using environmental temperature detected by said temperature detector is in excess of the fixed temperature, warming up operation is continued, and when a temperature detected by a temperature detector for detecting a temperature of a heating roller surface in either region reaches a temperature capable of fixing, a ready display is lighted, thereafter only a heating source for mainly heating a heating roller surface in a region not having reached a temperature capable of fixing is forcibly lighted till the fixed conditions are satisfied, and at the time of said forcible lighting

operation, a heating source for mainly heating a heating roller surface in a region having reached a temperature capable of fixing is not lighted.

4. A control method of a fixing device in an image forming apparatus constituted by a heating roller according to a system in which a plurality of heating sources different in light-distribution characteristics are disposed internally, and the surface is divided in region in the lengthwise direction, the method comprising:

detecting at least, a temperature of a heating roller surface in a region through which paper of small width passes, and a temperature of a heating roller surface in a region through which paper of small width does not pass where paper of large width is carried; and

continuing warming up operation, and when a temperature of a heating roller surface in said either region reaches a temperature capable of fixing, a ready display is lighted.

5. A control method of a fixing device in an image forming apparatus constituted by a heating roller according to a system in which a plurality of heating sources different in light-distribution characteristics are disposed internally, and the surface is divided in region in the lengthwise direction, the method comprising:

detecting at least, a temperature of a heating roller surface in a region through which paper of small width passes, and a temperature of a heating roller surface in a region through which paper of small width does not pass where paper of large width is carried; and

continuing warming up operation, and when a temperature of a heating roller surface in said either region reaches a temperature capable of fixing, a ready display is lighted, thereafter a heating roller surface in a region not

having reached a temperature capable of fixing is heated by forcibly lighting a heating source till the fixed conditions are satisfied, and at the time of the forcible lighting operation, a heating roller surface in a region having reached a temperature capable of fixing is not heated.

6. The control method of a fixing device in an image forming apparatus according to claim 5, wherein where a using environmental temperature is in excess of a fixed temperature, the warming up operation is continued, and when a temperature of a heating roller surface in said either region reaches a temperature capable fixing, a ready display is lighted, thereafter a heating roller surface in a region not having reached a temperature capable of fixing is heated by forcibly lighting a heating source till the fixed conditions are satisfied, and at the time of the forcible lighting operation, a heating roller surface in a region having reached a temperature capable of fixing is not heated.